

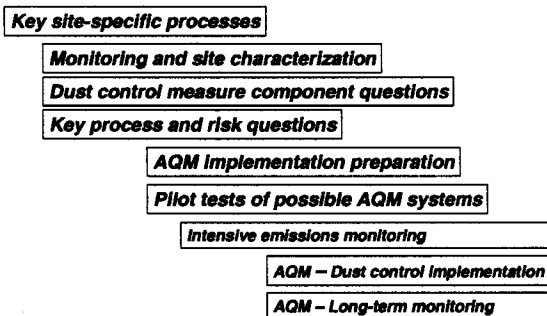
## Draft Air Quality Research Priorities

January 11, 2006

## Criteria for prioritization

- ❖ Importance of findings to short-term activities affecting the future of the Salton Sea and surrounding area
- ❖ Potential insight into public health or environmental aspects of current or future proposed actions
- ❖ Potential to reduce the cost burden or water requirements of ecosystem restoration alternatives
- ❖ Potential to resolve major AQM technical and financial feasibility questions
- ❖ Cost and availability of resources to conduct the work
- ❖ Potential for collaboration or synergy with other ongoing activities

## Relative sequence of work



## Key site-specific processes

- ❖ Crust Strength and Stability (*including vulnerability mapping*)
- ❖ Crust Mineralogy/Behavior (Literature and Modeling, *including comparative plays work*)
- ❖ Crust Mineralogy/Behavior (Lab and Field Tests, *including comparative plays work*)
- ❖ Crust Formation Hydrology (Field Tests and Modeling)

## Monitoring and site characterization

- ❖ Soil/Subsurface Conditions
- ❖ Sand Source Location and Characteristics
- ❖ Sand Motion Monitoring
- ❖ Monitoring/modeling for Playa/Non-playa Emissions

## Dust control measure component questions

- ❖ Plant Species Viability
- ❖ Water Blending and Treatment

### **Key process and risk questions**

- ❖ Gravel blanket feasibility study
- ❖ Surface stabilization study
- ❖ Selenium Uptake and Bio-availability in Plants
- ❖ Selenium Bio-availability from Wetted Sediments

### **AQM implementation preparation** (for feasible AQM; WEV example shown)

- ❖ Plant Propagation (Literature)
- ❖ Plant Propagation (Lab and Tests)
- ❖ Plant Propagation (Implementation)

### **Pilot tests of possible AQM systems**

(for feasible systems; may be more or less than shown)

- ❖ Pilot Test of WEV
- ❖ Pilot Test of Stabilization with Brine
- ❖ Pilot Test of Gravel Cover
- ❖ Pilot Test of Sand Fences
- ❖ Pilot Tests of Tillage
- ❖ Tests of Chemical Stabilization

### **Draft Air Quality Research Priorities**

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### **Major categories of work**

- ❖ Key site-specific processes
- ❖ Monitoring and site characterization
- ❖ Dust control measure component questions
- ❖ Key process and risk questions
- ❖ AQM implementation preparation
- ❖ Pilot tests of possible AQM systems